



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,396	01/31/2001	Jagtar Singh Saroya	KLR 7146.084	4249

7590

11/06/2002

CHERNOFF, VILHAUER, McCLUNG & STENZEL
1600 ODS Tower
601 S W Second Avenue
Portland, OR 97204

EXAMINER

AMARI, ALESSANDRO V

ART UNIT PAPER NUMBER

2872

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,396

Applicant(s)

SAROYA, JAGTAR SINGH

Examiner

Alessandro V. Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 15-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of invention I in Paper No. 4 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regard to claim 1, the claim recitation, "a mounting for a wave plate comprising a journal box" is a single means claim, in that the means recitation does not appear in combination with other recited element of means and is subject to undue breadth and is held not enabling.

Claim Objections

4. Claims 15, 16, 17, 19 and 22-24 are objected to because of the following informalities:

Regarding claim 15, line 1, the phrase "said support structure" lacks antecedent basis.

Art Unit: 2872

Regarding claim 16, line 1, the phrase "said support structure" lacks antecedent basis.

Regarding claim 17, line 1, the phrase "said support structure" lacks antecedent basis.

Regarding claim 19, line 2, the phrase "said support structure" lacks antecedent basis.

Regarding claim 22, the phrase "said bendable member" lacks antecedent basis.

Regarding claim 24, line 1, the phrase "said annular opening" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Henkes et al. U.S. Patent 4,936,680.

In regard to claim 1, Henkes et al. discloses (see Figures 1 and 1a) a mounting for a wave plate (34) comprising a journal box (30,33) adapted to support said wave plate for rotation as described in column 2, lines 40-60. It should be noted that in light of the applicant's specification (see Figure 1, element 80), the elements 30, 33 of Henkes et al. is can be read as a reasonable interpretation of a journal box.

Regarding claim 2, Henkes et al. discloses that said journal box is adapted to support said wave plate for rotation exceeding one-half revolution as described in column 2, lines 40-60 and column 3, lines 13-56.

Regarding claim 3, Henkes et al. discloses that said wave plate is supported for rotation substantially about a normal to an intersection of a fast and a slow axis of said wave plate revolution as described in column 2, lines 40-60 and column 3, lines 13-56.

Regarding claim 4, Henkes et al. discloses that said wave plate rotates with respect to said journal box as described in column 2, lines 40-60 and as shown in Figure 1a.

Regarding claim 5, Henkes et al. discloses that said journal box remains stationary as described in column 2, lines 40-60 and as shown in Figure 1a.

Regarding claim 6, Henkes et al. discloses (a) a frame (32) retaining said wave plate; and (b) said frame rotatable with respect to said journal box as described in column 2, lines 40-60 and as shown in Figure 1a.

Regarding claim 10, Henkes et al. discloses (see Figures 1 and 1a) a mounting for a wave plate comprising: (a) a frame (32) adapted to retain said wave plate; (b) a support structure (30) adapted to support said frame; and (c) said frame rotatable with

respect to said support structure as described in column 2, lines 40-60 and as shown in Figure 1a.

7. Claims 10-13 and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe U.S. Patent 6,460,998.

In regard to claim 10, Watanabe discloses (see Figures 6, 7, 9, 10) a mounting for a wave plate comprising: (a) a frame (820) adapted to retain said wave plate (960); (b) a support structure (810) adapted to support said frame; and (c) said frame rotatable with respect to said support structure as shown in Figure 9.

In regard to claim 11, Watanabe discloses (see Figures 6, 7, 9, 10) a mounting for a wave plate (960) comprising: (a) a frame (820) adapted to retain said wave plate; (b) a supporting structure (810) adapted to support said frame for rotation; (c) a bendable member (825) having a first end affixed to said frame; (d) a substantial length of said bendable member proximate to a periphery of said frame as shown in Figure 7; and (e) said bendable member having a second end as shown in Figure 7.

Regarding claim 12, Watanabe discloses rotating said wave plate by moving said bendable member as shown in Figures 8 and 9.

Regarding claim 13, Watanabe discloses a retaining mechanism (830) to selectively inhibit the rotational movement of said frame as shown in Figures 8 and 9.

Regarding claim 18, Watanabe discloses that said wave plate is supported for rotation substantially about a normal to an intersection of a fast and a slow axis of said wave plate as shown in Figure 9 and as described in column 8, lines 20-55.

Regarding claim 17, Watanabe discloses that said support structure is adapted to support said wave plate for rotation exceeding 360 degrees as described in column 8, lines 52-55. For example the wave plate could be rotated by 363 degrees (= 3 degrees).

Regarding claim 19, Watanabe discloses that said wave plate rotates with respect to said support structure as shown in Figure 9.

Regarding claim 20, Watanabe discloses that said supporting structure remains stationary as shown in Figure 9.

Regarding claim 21, Watanabe discloses that said supporting structure completely encloses said wave plate as shown in Figures 6, 7 and 9.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 14 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe U.S. Patent 6,460,998.

Regarding claim 14, Watanabe teaches a wave plate as set forth above, but does not teach that the wave plate is substantially circular.

In regard to claim 22, Watanabe teaches (see Figures 6, 7, 9, 10) a mounting for a wave plate comprising (a) an frame (820) adapted to support said wave plate; (b) a supporting structure (810) adapted to support said frame for rotation of said wave plate

about a normal to an intersection of a fast and a slow axis of said wave plate; (c) a movable member (825) having a first end affixed to said frame; (d) said bendable member having a second end; and (e) a retaining mechanism (830) adapted to selectively inhibit the rotational movement of said frame.

Regarding claim 23, Watanabe teaches that said supporting structure defines an opening to support said frame as shown in Figures 7 and 9.

Regarding claim 24, Watanabe teaches that said opening is smaller than said wave plate as shown in Figures 7, 9 and 10.

However, Watanabe does not disclose that the wave plate, frame and supporting structure have an annular or circular shape. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an annular shape, since it has been held that a mere change in shape of an element is generally recognized as being within the level of ordinary skill in the art when the change in shape is not significant to the function of the combination. Further, one would be motivated to select the annular or circular shape for the purpose of a more compact fit.

Allowable Subject Matter

10. Claims 7-9 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 7 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "a bendable member having a first end affixed to said frame; (b) a substantial length of said bendable member proximate to a periphery of

Art Unit: 2872

said frame; and (c) said bendable member having a second end" as set forth in the claimed combination.

Claim 15 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "said support structure is adapted to support said wave plate for rotation exceeding 180 degrees" as set forth in the claimed combination.

Claim 16 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "said support structure is adapted to support said wave plate for rotation exceeding 90 degrees" as set forth in the claimed combination.

The prior art of record, Henkes teaches a mounting for a wave plate comprising a journal box adapted to support said wave plate for rotation and that a frame retains said wave plate; and that said frame is rotatable with respect to said journal box. However, Henkes et al. does not teach a bendable member having a first end affixed to said frame; a substantial length of said bendable member proximate to a periphery of said frame; and said bendable member having a second end.

Watanabe teaches a mounting for a wave plate comprising: a frame adapted to retain said wave plate; and a supporting structure adapted to support said frame for rotation; and a bendable member having a first end affixed to said frame; and a substantial length of said bendable member proximate to a periphery of said frame; and said bendable member having a second end. However, the prior art does not teach that the wave plate is substantially circular or that said support structure is adapted to support said wave plate for rotation exceeding 90, or 180 degrees and there is no motivation or teaching to modify this difference as derived.

Art Unit: 2872

Conclusion

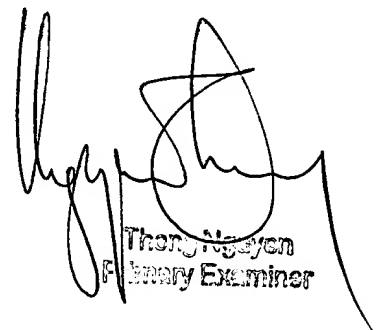
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Strumia et al. U.S. Patent 3,938,877 teaches a mounting for a wave plate comprising a frame adapted to retain said wave plate; a support structure adapted to support said frame; and that said frame rotatable with respect to said support structure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (703) 306-0533. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ava *UVA*
November 4, 2002


Thomas Nguyen
Primary Examiner